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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/485,675	02/24/2000	TAKESHI OGINO	015358/0104	9758

7590 03/06/2002

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EXAMINER

WACHTEL, ALEXIS A

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/485,675	OGINO ET AL	
	Examiner	Art Unit	
	Alexis Wachtel	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4</u> . | 6) <input type="checkbox"/> Other: |

Detailed Action

Specification

1. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "In order to achieve the above objects..." (pp.4, Disclosure of Invention) and "...from excessive manifestation of the moisture absorbing capacity..." (pp. 10, lines 19-21).

1a. With regards to claims 1 and 3, Examiner suggests that Applicant replace phrase "characterized in comprising" with 'comprising' in order to facilitate clarity.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 2,4,9 and 10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claims as currently written claim a polyacrylate-series fiber, but the Specification on pp.6 discloses polyacrylonitrile –series fibers and crosslinked acrylic fibers which are not equivalent to polyacrylate-series fibers. Thus polyacrylate-series fibers are not enabled by the Specification.

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3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. With regards to claims 1,3,6 and 8, Applicant does not clearly describe what is meant by phrase "heat retaining fiber including an air layer of not less than 50ml per 1 gram and a moisture-absorbent/heat generating fiber" or "an immobile air layer formed by the heat retaining fiber." Does Applicant mean that 50ml's of heat retaining fiber weighs 1 gram? Is it the density of the air layer? Is Applicant referring to air density or loft of the blend of two said fibers? In addition, what is the air layer? Examiner assumes that said air layer refers to the loft of the heat retaining fiber.

6. With regards to claim 2, Applicant identifies the "heat retaining fiber" as "feather." Feathers are not fibers. Examiner suggests that Applicant change language of claim to address this discrepancy.

7. With regards to claims 2,4,9 and 10, Applicant does not clearly describe what is meant by term "series" in "polyacrylate-series." Is Applicant referring to a family of acrylic polymers in the most general sense? Examiner assumes this is the case.

8. With regards to claim 1, Applicant does not clearly specify what term "both" refers to. Is Applicant referring to an outer material and a lining or is he referring to the intermediate material and the combined outer material and lining? Examiner assumes Applicant is referring to outer material and a lining.

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9. In addition, with regards to claim 8, Applicant does not clearly describe what is meant by phrase "other desired properties,...and having desired properties." What are these desired properties? Examiner gives no patentable weight to these undisclosed properties.

10. With regards to claim 12, Applicant does not clearly describe what is meant by phrase "...by heating or hot air to an inherent minimum moisture content of the fiber." Examiner assumes Applicant means to say that hot air is used to dry the fiber to an inherent minimum moisture content.

11. With regards to claims 1,2,6,7,11-13, Applicant does not clearly describe what is meant by phrase "dried to an inherent minimum moisture content." What is the fiber's "inherent minimum moisture content"?

Claim Rejections - 35 USC § 102/103

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-5, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB2000440A.

Examiner Note: with regards to claim 1-3, it has been held that the functional "whereby" statement does not define any structure and accordingly can not server top distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957). In addition, with regards to claim 1, Examiner gives no patentable weight to the outer and inner material, wherein both have waterproof properties and windproofness and moisture permeability.

GB2000440A discloses a filler for quilts, pillows, cushions, sleeping bags, ski jackets wherein said filler is composed of feathers and fibers (pp. 1, col 1, lines 5-9). Said filler consists of a substantially homogenous mixture of feathers and fibers comprising from 0.1% to 40% by weight of fibers of said mixture and from 99.9% to 60% by weight of feathers by blending means whereby a substantially homogeneous distribution of fibers among feathers is produced. Examiner note: GB2000440A does not mention a binder used in the blending process. Said fibers are preferably made of polyacrylonitrile (Abstract). The filler material is blended so that the filler components are homogeneously blended (pp. 2, lines 29-51) Examiner Note: The method limitations of drying or humidifying said fibers are not given weight in the article claims since the final product will still be an article with a filler material disposed within it.

Although GB2000440A does not explicitly teach the claimed air density or loft of the feathers, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. feathers). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed air density or loft of the heat retaining fibers would obviously have been provided by the process disclosed by GB2000440A. Note

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In re Best, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 6-10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB2000440A in view of US 6,112,328 to Spector.

Though GB2000440A as set forth above teaches that the inventive filler can be used in sleeping bags, jackets, etc., GB2000440A fails to teach the filler material used as an intermediate material with the claimed article structure wherein said article is waterproof, water vapor permeable, and windproof.

Spector is directed to a light weight fabric for producing outerwear garments. The fabric is composed of inner and outer skins formed of woven synthetic plastic fibers, such as nylon, which render the skins water resistant, yet permeable to vapor whereby the fabric is breathable. Examiner note: the woven synthetic fiber structure is assumed to have a degree of windproofness because of its water resistance which serves to prevent fluid penetration. Sandwiched between the skins is a layer of polyester fiberfill which imparts thermal insulation-characteristics to the fabric (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the fiberfill in Spector's fabric with the homogenously blended moisture-absorbent/heat generating fibers (poly acrylonitrile fibers) and heat retaining fibers (feathers) of GB2000440A which would be used as an intermediate material to be placed in between the inner and outer skins of the fabric structure suggested by Spector, motivated by the desire to obtain an article of clothing suitable for cold weather applications. Examiner Note: The method limitations of drying or humidifying said fibers are not given weight in the article claims since the final product will still be an article with a filler material disposed within it.

17. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB2000440A.

The features of GB2000440A have been set forth above.

GB2000440A fails to teach that the moisture-absorbent/heat generating fibers and heat retaining fibers are blended under the condition of the moisture-absorbent/heat generating fibers dried to an inherent minimum moisture content, **or**, that the moisture-absorbent/heat generating fibers and heat retaining fibers are blended under the condition of the moisture-absorbent/heat generating fibers are dried to an inherent minimum moisture content wherein the drying step involves drying via heat or hot air, then cooling, with dry air the moisture-absorbent/heat generating fibers dried to an inherent minimum moisture content, **or** that the moisture-absorbent/heat generating fibers and heat retaining fibers are blended under the condition of the moisture-absorbent/heat generating fibers and the heat retaining fibers are dried to an

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inherent minimum moisture content wherein the drying step involves drying via heat or hot air, then cooling, with dry air the moisture-absorbent/heat generating fibers to an inherent minimum moisture content.

It would have been obvious to one ordinary skill in the art at the time the invention was made to have dried the fibers to an inherent minimum moisture content motivated by the desire to decrease the weight of the fibers and prevent them from clumping together before mixing. The textile industry prepares fibers in a stable, controlled environment wherein the humidity can be suitably changed to optimize fiber processing.. Variations of the drying steps that Applicant claims as novel are obvious variations that solve the problem of drying the fibers.

18. The prior art of record and not relied upon is considered pertinent to Applicant's disclosure. In addition, the following references are cited for disclosing various aspects of Applicant's invention:

US 5112684

19. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alex Wachtel, whose number is (703)-306-0320. The Examiner can normally be reached Mondays-Fridays from 8:30am to 4:30pm.

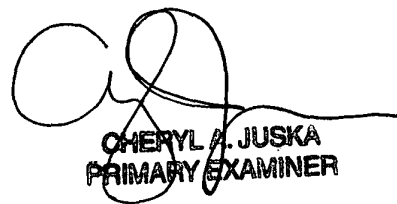
If attempts to reach the Examiner by telephone are unsuccessful and the matter is urgent, the Examiner's supervisor, Mr. Terrel Morris, can be reached at (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



CHERYL A. JUSKA
PRIMARY EXAMINER